Company Tracking #: 16-CA-45-RR

State: District of Columbia First Filing Company: Great Northern Insurance Company, ...

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: Commercial Auto

Project Name/Number: Adoption of ISO's Loss Costs Revision/16-CA-45-RR

Filing at a Glance

Companies: Great Northern Insurance Company

Pacific Indemnity Company Vigilant Insurance Company Federal Insurance Company

Product Name: Commercial Auto
State: District of Columbia
TOI: 20.0 Commercial Auto

Sub-TOI: 20.0000 Commercial Auto Combinations

Filing Type: Rate

Date Submitted: 11/08/2016

SERFF Tr Num: ACEH-130800706 SERFF Status: Submitted to State

State Tr Num: State Status:

Co Tr Num: 16-CA-45-RR

Effective Date 02/15/2017

Requested (New):

Effective Date 02/15/2017

Requested (Renewal):

Author(s): Jade McDermott, Sean Fakete

Reviewer(s):

Disposition Date:
Disposition Status:
Effective Date (New):
Effective Date (Renewal):

SERFF Tracking #: ACEH-130800706 State Tracking #: Company Tracking #: 16-CA-45-RR

State: District of Columbia First Filing Company: Great Northern Insurance Company, ...

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: Commercial Auto

Project Name/Number: Adoption of ISO's Loss Costs Revision/16-CA-45-RR

General Information

Project Name: Adoption of ISO's Loss Costs Revision Status of Filing in Domicile: Not Filed

Project Number: 16-CA-45-RR Domicile Status Comments:

Reference Organization: ISO Reference Number: See Filing Description
Reference Title: See Filing Description Advisory Org. Circular: LI-CA-2015-074

Filing Status Changed: 11/08/2016

State Status Changed: Deemer Date:

Created By: Jade McDermott

Submitted By: Jade McDermott

Corresponding Filing Tracking Number:

Filing Description:

We wish to adopt the following ISO loss costs revision:

District of Columbia Revised Commercial Automobile Advisory Prospective Loss Costs (ISO Reference Filing Number CA-2015-BRLA1)

We are adopting the loss costs with our current on-file multipliers. An Actuarial Memorandum explaining our revisions is attached under the Supporting Documentation tab to assist in your review.

Your approval will be appreciated effective February 15, 2017.

Company and Contact

Filing Contact Information

Jade McDermott, State Filings Analyst jlmcdermott@chubb.com 202 Hall's Mill Road 908-572-4429 [Phone] P.O. Box 1650 908-572-4820 [FAX]

Whitehouse Station, NJ 08854

 Company Tracking #: 16-CA-45-RR

State: District of Columbia First Filing Company: Great Northern Insurance Company, ...

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: Commercial Auto

Project Name/Number: Adoption of ISO's Loss Costs Revision/16-CA-45-RR

Filing Company Information

Great Northern Insurance CoCode: 20303 State of Domicile: Indiana Company Group Code: 626 Company Type: Stock

One American Square Group Name: Chubb State ID Number:

202 N. Illinois St. FEIN Number: 41-0729473

Suite 2600 Indianapolis, IN 46282

(908) 572-2000 ext. [Phone]

(908) 572-2000 ext. [Phone]

Federal Insurance Company CoCode: 20281 State of Domicile: Indiana

One American Square Group Code: 626 Company Type: Stock 202 N. Illinois St. Group Name: Chubb State ID Number:

Suite 2600 FEIN Number: 13-1963496

Indianapolis, IN 46282

Vigilant Insurance Company CoCode: 20397 State of Domicile: New York

55 Water Street Group Code: 626 Company Type: Stock

New York, NY 10041-2899 Group Name: Chubb State ID Number:

(908) 572-2000 ext. [Phone] FEIN Number: 13-1963495

Pacific Indemnity Company CoCode: 20346 State of Domicile: Wisconsin

Two Plaza EastGroup Code: 626Company Type: StockSuite 1450Group Name: ChubbState ID Number:

330 East Kilbourn Avenue FEIN Number: 95-1078160

Milwaukee, WI 53202-3146

Filing Fees

Fee Required? No Retaliatory? No

(908) 572-2000 ext. [Phone]

Fee Explanation:

SERFF Tracking #: ACEH-130800706 State Tracking #: Company Tracking #: 16-CA-45-RR

State: District of Columbia First Filing Company: Great Northern Insurance Company, ...

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: Commercial Auto

Project Name/Number: Adoption of ISO's Loss Costs Revision/16-CA-45-RR

Rate Information

Rate data applies to filing.

Filing Method:

Rate Change Type: Decrease

Overall Percentage of Last Rate Revision: 1.700%

Overall Percentage of Last Rate Revision: 1.700%

Effective Date of Last Rate Revision: 11/01/2015

Filing Method of Last Filing:

Company Rate Information

Company	Overall % Indicated	Overall % Rate	Written Premium Change for	Number of Policy Holders Affected	Written Premium for	Maximum % Change	Minimum % Change
Name:	Change:	Impact:	this Program:	for this Program:	this Program:	(where req'd):	(where req'd):
Great Northern Insurance Company	%	-1.900%	\$-6,982	55	\$367,468	8.100%	-5.000%
Pacific Indemnity Company	%	-1.900%	\$0	0	\$0	8.100%	-5.000%
Vigilant Insurance Company	%	-1.900%	\$0	0	\$0	8.100%	-5.000%
Federal Insurance Company	%	-1.900%	\$-16,225	245	\$853,953	8.100%	-5.000%

SERFF Tracking #: ACEH-130800706 State Tracking #: 16-CA-45-RR

State: District of Columbia First Filing Company: Great Northern Insurance Company, ...

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: Commercial Auto

Project Name/Number: Adoption of ISO's Loss Costs Revision/16-CA-45-RR

Rate/Rule Schedule

Item No.	Schedule Item Status	Exhibit Name	Rule # or Page #	Rate Action	Previous State Filing Number	Attachments
1		Loss Costs Multipliers, Waived Premiums, and Minimum Premiums Rate Page	Chubb Rate Page Ex. Pg. DC.1.rt Edition 2/2017	Replacement	SERFF Tracking Number CHUB- 130198486, Chubb Filing Number 15-CA- 38-RR	LCM page.pdf

LOSS COSTS MULTIPLIERS: DISTRICT OF COLUMBIA

The following loss costs multipliers will apply for the writing companies indicated below:

Writing Company:	<u>Liability LCM</u>	Physical Damage LCM
Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company	3.101	2.416

Although the rate clarification statements below refer to the ISO Rule numbers to which they apply, they are not being filed as replacement rules for those ISO Commercial Auto Manual Rules.

SECTION 1 - GENERAL RULES:

RULE #8 - POLICY WRITING MINIMUM PREMIUM

- A. Prepaid policies \$ 175.00
- B. Annual premium payment plan policies or continuous policies \$ 175.00

Rule #9 - ADDITIONAL PREMIUM CHANGES

B. Waive additional premium of \$ 15.00 or less.

Rule #10 - RETURN PREMIUM CHANGES

B. Waive return premium of \$ 15.00 or less (if not requested by the insured). Grant the return premium if requested by the insured.

SECTION II - TRUCKS, TRACTORS AND TRAILERS:

Rule #24 - TRUCKERS/MOTOR CARRIERS

C.2.b.(5)(LC) Cost of Hire Basis Liability Minimum Premium

The minimum premium is \$ 21.00 for bodily injury and property damage liability at a \$100,000 limit.

SECTION VI - SPECIAL TYPES:

Rule # 79 - REPOSSESSED AUTOS

B.1.d.(LC) Repossessed Autos Liability Minimum Premium

The minimum premium is \$ 30.00 bodily injury and property damage at a \$100,000 limit.

SECTION VII - COMMON COVERAGES AND RATING PROCEDURES:

Rule #89 - NON-OWNERSHIP LIABILITY

C.2.e.(LC) Social Service Agency Risks Liability Minimum Premium

The minimum premium for volunteers bodily injury and property damage liability is \$ 21.00 at a \$100,000 limit.

The minimum premium is \$ 7.00 per policy for blanket individual bodily injury and property damage liability at a \$100,000 limit.

Rule # 90 - HIRED AUTOS

B.3.g.(LC) Hired Autos Liability Minimum Premium

The minimum premium is \$ 70.00 for bodily injury and property damage liability at a \$100,000 limit.

SERFF Tracking #: ACEH-130800706 State Tracking #: Company Tracking #: 16-CA-45-RR

State: District of Columbia First Filing Company: Great Northern Insurance Company, ...

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: Commercial Auto

Project Name/Number: Adoption of ISO's Loss Costs Revision/16-CA-45-RR

Supporting Document Schedules

Bypassed - Item:	Consulting Authorization
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	
Satisfied - Item:	A. (
	Actuarial Certification (P&C)
Comments:	
Attachment(s):	Rate and Rule Filing Certification.pdf
Item Status:	
Status Date:	
Satisfied - Item:	District of Columbia and Countrywide Experience for the Last 5 Years (P&C)
Comments:	District of Columbia and Country Mac Experience for the East of Fear (Fac)
Attachment(s):	Actuarial Exhibits.pdf
Item Status:	
Status Date:	
Satisfied - Item:	District of Columbia and Countrywide Loss Ratio Analysis (P&C)
Comments:	
Attachment(s):	Actuarial Exhibits.pdf
Item Status:	
Status Date:	
Satisfied - Item:	Actuarial Memorandum/RFAF and Calc of Company LCM
Comments:	and one of company dom
Attachment(s):	Actuarial Memorandum.pdf RFAF and Calc of Company LCM.pdf
Item Status:	
Status Date:	

DISTRICT OF COLUMBIA DEPARTMENT OF INSURANCE SECURITIES & BANKING INSURANCE RATE AND RULE FILING CERTIFICATION

202 Hall's Mill Road, P				
Whitehouse Station, N.	J. 08889-1650		·	
Date of Filing				
Line of Business	Commercial Auto	Proposed Effective Date	02/15/2017	
Notes:	A Premium Survey Form must be	attached to every private passeng	er auto filing	
<u> </u>	All information shall be for the Di	istrict of Columbia only, unless of	herwise specified	
<u> </u>	Provide a filing memorandum wh	ich fully states the purpose of the	filing	
Is this an independent fil		'me too" filing	or a filing related to (the approved
filing of a rating organiz				
	ing, specify approval date and refe		•	
We are filing in order t	o adopt the approved ISO comp	nercial auto loss costs, ISO refe	rence filing number CA	-2015-BRLA1.
	s for the District of Columbia pol	icies for the last five years:		
List all rate level change Commercial Auto Effective Date 11/01/2015 02/01/2013	Overall Rate Leve			
Commercial Auto <u>Effective Date</u> 11/01/2015	Overall Rate Level 1.7%			
Commercial Auto <u>Effective Date</u> 11/01/2015 02/01/2013	Overall Rate Leve 1.7% 1.7%	el Change	five years:	
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the interpretation of the change in the change in the interpretation of the change in	Overall Rate Level 1.7%	el Change	five years:	
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the I	Overall Rate Leve 1.7% 1.7% 1.7% number of policies in force in the	District of Columbia over the last	five years:	
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the I Mandatory Number of Pol	Overall Rate Leve 1.7% 1.7%	District of Columbia over the last	five years:	
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the I	Overall Rate Leve 1.7% 1.7% 1.7% number of policies in force in the	el Change District of Columbia over the last	·	
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the I Mandatory Number of Pol	Overall Rate Leve 1.7% 1.7% 1.7% number of policies in force in the licies in Force (as December 31st) Voluntary	District of Columbia over the last	Grand	
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the i Mandatory Number of Pol Commercial Auto	Overall Rate Leve 1.7% 1.7% 1.7% number of policies in force in the licies in Force (as December 31st) Voluntary New Renewal	District of Columbia over the last Assigned Risk	Grand Total	Growt
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the i Mandatory Number of Pol Commercial Auto	Overall Rate Leve 1.7% 1.7% 1.7% 1.7% New Renewal 45 258	District of Columbia over the last Assigned Risk not applicable	Grand Total 303	Growt () () ⁿ _n
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the I Mandatory Number of Pol Commercial Auto 5th Prior Year - 2011 4th Prior Year - 2012	Overall Rate Leve 1.7% 1.7% 1.7% number of policies in force in the sicies in Force (as December 31st) Voluntary New Renewal 45 258 45 253	District of Columbia over the last Assigned Risk not applicable not applicable	Grand	Growi () () ¹⁰ / ₀ -1.7%
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the I Mandatory Number of Pol Commercial Auto 5th Prior Year - 2011 4th Prior Year - 2012 3rd Prior Year - 2013	Overall Rate Level 1.7%	Assigned Risk not applicable not applicable	Grand Total 303 298 283	Percer <u>Growt</u> () () ¹⁰ * ₀ -1.79% -5.9%
Commercial Auto Effective Date 11/01/2015 02/01/2013 Show the change in the I Mandatory Number of Pol Commercial Auto 5th Prior Year - 2011 4th Prior Year - 2012	Overall Rate Leve 1.7% 1.7% 1.7% number of policies in force in the sicies in Force (as December 31st) Voluntary New Renewal 45 258 45 253	District of Columbia over the last Assigned Risk not applicable not applicable	Grand	Growi () () ¹⁰ / ₀ -1.7%

G. Show the maximum and minimum rate level effect of this filing by coverage. These effects shall illustrate the maximum increase (or smallest decrease) and minimum increase (or largest decrease), which will result to any one insured from the proposed changes to rates and/or rating factors.

The calculation of these effects shall be: the proposed change in the base rate, times the maximum (or minimum) change to each rating factor affecting coverage.

Percentage Rate Level Changes

Coverage	Maximum Increase(or smallest decrease)	Minimum Increase (or largest decrease)
Liability	0.0%	-5.0%
Comprehensive	0.0%	0.0%
Collision	8.1%	7.0%

H.	Please provide	information	on the actuaria	supporting	data
----	----------------	-------------	-----------------	------------	------

(1)	Calendar Year Accident Year Policy year Other (Specify)	x	Basic Limits Total Limits	x
-----	---	---	------------------------------	---

If total limits data has been provided, specify the part of the filing that illustrates how large losses have been considered. Not applicable, we are filing to adopt ISO loss costs with our current on-file multipliers.

- All rate filings shall mathematically consider investment income, pursuant to D.C. Code Section 31-(2) 2703(6), 2001 Edition (as amended). Specify the part of the filing which mathematically determines investment income:
 - Please refer to the attached Exhibit 4.
- (3) Please provide a chart showing the number of earned exposures for each coverage and each year of experience. Please refer to the attached Exhibit 5.
- Please provide a chart showing the actual written premium by coverage, which was used to calculate the (4) overall percentage rate change. Please refer to the attached Exhibit 1.

The following data for the District of Columbia should be submitted from page 15 of the Annual Statement for the most recent two years.

Data presented is for total commercial auto - annual statement lines 19.3, 19.4, and 21.2

	Most Recent Year (2015)				
	Direct Premiu	101	Direct Losse	S	
Coverage	Written	Earned	Pnid	Incurred	
			incl. ALAE	incl. ALAE	
Bodily Injury	727,085	744,952	159,231	304,936	
Property damage		285,400	68,657	108,695	
Uninsured Motorist	70,863	73,030	2,090	11,754	
Other Liability	455	679	0	116	
Total	1,084,157	1,104,061	229,978	425,501	
Personal Injury Protection	18,305	18,079	0	2,220	
Collision	136,657	135,727	66,508	68,143	
Comprehensive		85,042	25,288	25,769	
Other Physical Damage					
Total	223,858	220,769	91,796	93,912	

Underwriting Income/Earned Premium

15.00%

Annual Statement for the year 2015 of the Combined Federal Insurance Cumpany (countrywide data, all lines)

		Prior Year (2014)		, , ,
	Direct Premit	ım	Direct Losses	1
Coverage	Written	Earned	Paid .	Incurred
			incl. ALAE	incl. ALAE
Bodily Injury		<u>756,924</u>	9,730	102,829
Property damage		282,931	29,170	50,145
Uninsured Motorist	75,826	69,483	0	4,914
Other Linbility	949	678	0	64
Total	1,163,594	1,110,016	38,900	157,952
Personal Injury Protection	18,033	17,410	0	235
Collision Comprehensive Other Physical Damage	74,319	110,609 69,403	24,405 2,726	25,277 3,493
Total		180,012	27,131	28,770

Underwriting Income/Earned Premium 12.90%
Annual Statement for the year 2014 of the Combined Federal Insurance Company (countrywide data, all lines)

As an authorized representative of the Company or rating organiza	tion. I hereby certify that to the best of my knowledge
and belief the attached filing complies with all applicable laws, reg	sulations and bulletins of the District of Columbia.
Ju-Young Suh, FCAS, MAAA	Sould I Suh
NAME OF AUTHORIZED REPRESENTATIVE	SIGNATURE (NEQUIRED)
Vice President and Actuary	(908) 572 - 4531
TITLE	TELEPHONE NUMBER
	jyauh@chubb.com
	E-MAIL ADDRESS

F \$27 (Ed. 10/05) UNIFORM

I.

Cumulative ISO Loss Costs Changes Since Chubb's Last Loss Costs Adoption

Loss Costs Filing LI-CA-2015-060, Approval Circular LI-CA-2015-074 *Based on Chubb's 2015 Written Premium Distribution

		(1)	(2)	(3)	(4)	(5)
						(1+(3))x(1+(4))-1
			LI-CA-2015-060	Combined		
		**************************************	Approved	Approved	3.6 14. 11	CI 11
COMMEDIA	LCADG	Written	ISO 10/1/2015	ISO LC	Multiplier	Chubb
COMMERCIA		Premium	LC Change	<u>Change</u>	Change^	Effect 5.00/
Liability	Non-PIP	685,025	-5.0%	-5.0%	0.0%	-5.0%
	PIP	12,448	0.0%	0.0%	0.0%	0.0%
DI D	UM	52,227	0.0%	0.0%	0.0%	0.0%
Phys Damage	Comprehensive	52,315	0.0%	0.0%	0.0%	0.0%
	Collision	61,619	7.0%	7.0%	0.0%	7.0%
Total Liability		749,700	-4.6%	-4.6%	0.0%	-4.6%
Total Physical l	Damage	113,934	3.8%	3.8%	0.0%	3.8%
Total Commerc	ial Cars	863,634	-3.5%	-3.5%	0.0%	-3.5%
PRIVATE PAS	SENGER TYPES					
Liability	Non-PIP	322,330	0.0%	0.0%	0.0%	0.0%
Ž	PIP	5,857	0.0%	0.0%	0.0%	0.0%
	UM	24,575	0.0%	0.0%	0.0%	0.0%
Phys Damage	Comprehensive	23,729	0.0%	0.0%	0.0%	0.0%
, ,	Collision	63,784	8.1%	8.1%	0.0%	8.1%
Total Liability		352,762	0.0%	0.0%	0.0%	0.0%
Total Physical I	Damage	87,513	5.9%	5.9%	0.0%	5.9%
Total Private Pa	assenger Types	440,275	1.2%	1.2%	0.0%	1.2%
GARAGES						
Liability	Non-PIP	0	0.0%	0.0%	0.0%	0.0%
21401111	PIP	0	0.0%	0.0%	0.0%	0.0%
Phys Damage	Dealers					
Thys Duniage	Comprehensive	7,502	0.0%	0.0%	0.0%	0.0%
	Collision	7,439	0.0%	0.0%	0.0%	0.0%
	Garage Keepers	.,		0.0,0		0.0,0
	Comprehensive	3,751	0.0%	0.0%	0.0%	0.0%
	Collision	3,720	0.0%	0.0%	0.0%	0.0%
Total Liability		0	0.0%	0.0%	0.0%	0.0%
Total Physical I	Damage	22,411	0.0%	0.0%	0.0%	0.0%
1 otal 1 lly sloui 1	Sumage	22,111	0.070	0.070	0.070	0.070
Total Garages		22,411	0.0%	0.0%	0.0%	0.0%
RATE CHANGE	E FOR ALL TYPES					
Total Liability		1,102,462	-3.1%	-3.1%	0.0%	-3.1% *
Total Physical I	Damage	223,858	4.2%	4.2%	0.0%	4.2%
Total		1,326,320	-1.9%	-1.9%	0.0%	-1.9%

[^]Based upon no change from current liability multiplier of 3.101 and physical damage multiplier of 2.416.

Derivation of the Needed Loss Costs Modification

(1)	(2)	(3)	(4)	
		Derived	Needed	
	Expected	Loss	Loss	
	Loss	Costs	Costs	
Coverage	Ratio	Multiplier*	Modification	
Liability	56.4%	3.101	74.90%	
Physical Damage	62.7%	2.416	51.48%	

^{*} Please see the attached Exhibit 1 for detail on the loss costs multiplier change. The derived loss costs multipliers achieve the needed rate change for which we are applying; please refer to the attached Exhibits 2.1 and 2.p which show the rate indications for commercial auto liability and physical damage, respectively.

56.4%

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

State of Dist Of Columbia Underwriting Expense Provisions Commercial Auto Liability

	Count	rywide	
			3 Year
<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>
14.1%	14.5%	14.8%	14.5%
12.0%	10.9%	10.8%	11.2%
4.1%	3.8%	3.8%	3.9%
2.6%	2.6%	2.4%	2.5%
32.8%	31.7%	31.8%	32.1%
	Dist of C	Columbia	
			3 Year
<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>
11.7%	12.6%	12.3%	12.2%
0.9%	1.0%	1.0%	1.0%
12.6%	13.6%	13.3%	13.2%
12.0%	10.9%	10.8%	11.2%
	3.8%	3.8%	3.9%
2.3%	2.2%	2.2%	2.2%
31.0%	30.4%	30.1%	30.5%
		Diet	of Columbia
		Dist	30.5%
S			13.1%
			43.6%
	14.1% 12.0% 4.1% 2.6% 32.8% 2013 11.7% 0.9% 12.6% 12.0% 4.1% 2.3% 31.0%	2013 2014 14.1% 14.5% 12.0% 10.9% 4.1% 3.8% 2.6% 2.6% 32.8% 31.7% Dist of C 2013 2014 11.7% 12.6% 0.9% 1.0% 12.6% 13.6% 12.0% 10.9% 4.1% 3.8% 2.3% 2.2% 31.0% 30.4%	14.1% 14.5% 14.8% 12.0% 10.9% 10.8% 4.1% 3.8% 3.8% 2.6% 2.4% 32.8% 31.7% 31.8% Dist of Columbia 2013 2014 2015 11.7% 12.6% 12.3% 0.9% 1.0% 1.0% 12.6% 13.6% 13.3% 12.0% 10.9% 10.8% 4.1% 3.8% 3.8% 2.3% 2.2% 2.2% 31.0% 30.4% 30.1% Dist Dist Dist Dist Dist

Notes

D. Expected Loss & LAE Ratio

- The state-specific ratios are from the Direct Page 15 Federal Combined Annual Statement. Countrywide ratios are from the Federal Combined IEE.
- All ratios are to earned premium except commissions and taxes, licenses, and fees, which are to written premium.

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

State of Dist Of Columbia Commercial Auto Liability

Return on Equity Calculation

For the purposes of these requirements, we have calculated an expected after-tax return on equity as follows:

$$ROE = \{[(UW + II) * PS] + YS\} * (1.000 - TX)$$

where:

ROE = Return on equity, after federal income taxes (See Historic Return on Equity Exhibit)

UW = Underwriting profit, as a percentage of premium

II = Investment income on policyholder funds, as a percentage of premium (See Investment Income Offset Exhibit)

PS = Premium to surplus ratio (See Premium to Surplus Ratio Exhibit)

YS = Investment income on surplus, as a percentage of surplus

(See Historic Investment Income Yield Exhibit)

TX = Effective Federal Income Tax rate (See Income Tax Exhibit)

We selected an underwriting profit provision of 13.1% This implies an after-tax return on equity of 15.0%

$$ROE = \{[(13.1\% + 5.4\%) * 0.800] + 3.5\%\} * (1 - 18.0\%) = 15.0\%$$

These returns are consistent with both our historic returns as shown in the Historic Return on Equity exhibit.

Exhibit 4.2 AUTO-L Sheet 1

Commercial Auto Liability State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

A.	Direct Earned Premiums for Calendar Year 2015 (see Sheet 2) 1				
В.	Une	earned Premium Reserve Subject to Investment (see Sheet 2)			
	1.	Mean Unearned Premium Reserve for Calendar Year 2015			
		 a. Unearned Premium Reserve as of 12/31/2015 b. Unearned Premium Reserve as of 12/31/2014 c. Mean Unearned Premium Reserve (a + b) / 2 	489,360 508,845 499,103		
	2.	Deduction for Prepaid Expenses			
		 a. Prepaid Expense Provisions: (1) Commissions & Brokerage (excluding Contingent) (2) Other Acquisition Expenses (3) 50% of General Expenses (4) Taxes, Licenses, & Fees (5) Total 	12.2% 11.2% 2.0% 2.2% 27.6%		
		b. Deduction for Prepaid Expenses (B.1.c x B.2.a.(5))	137,503		
	3.	Deduction for Federal Taxes Payable (B.1.c x 7.0%) (see Sheet 2)	34,937		
	4.	Deduction for Delayed Remission of Premiums			
		a. Average Agents' Balances Percentage (see Sheet 2)b. Delayed Remission of Premiums (A x B.4.a)	19.8% 222,274		
	5.	Net Unearned Premium Reserve Subject to Investment (B.1.c - B.2.b - B.3 - B.4.b)	104,389		
C.	Loss	s Reserves Subject to Investment (see Sheet 2)			
	1.	Expected Incurred Loss & Loss Adjustment Expense Ratio	64.5%		
	2.	Average Reserve to Incurred Ratio	2.251		
	3.	Expected Mean Loss and Loss Adjustment Expense Reserve (A x C.1 x C.2)	1,629,444		
D.	Net	Subject to Investment (B.5 + C.3)	1,733,833		
E.	Average Rate of Return on Invested Assets (see Sheet 3) 3.5%				
F.	Expected Investment Earnings (D x E) 60,684				
G.		o of Investment Earnings to Earned Premium (F / A) uals Investment Income Offset)	<u>5.4%</u>		

Commercial Auto Liability State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

- Item A 'Direct Earned premiums are from the Federal Combined Annual Statement for Commercial Auto Liability: (Page 15 Line 19.3, 19.4).
- Item B.1 Direct Unearned Premiums are from the Federal Combined Annual Statement for Commercial Auto Liability: (Page 15 Line 19.3, 19.4).
- Item B.2 Production costs and a significant portion of other underwriting expenses (excluding loss adjustment expenses) are incurred as soon as the policy is written and before the premium is earned. As a result, these monies are not available for investment.
- Item B.3 The Tax Reform Act of 1986 taxes 20% of the unearned premium reserve. At a corporate tax rate of 35%, this tax equals 7.0% ($.20 \times .35 = .07$) of the unearned premium reserve. As a result, these monies are not available for investment.
- Item B.4 The average agents' balances percentage is based on the following information for all lines of business from the Federal Combined Annual Statement:

Dolla	<u>rs in Thousands</u>	<u>2015</u>
(1)	Net Earned Premium (Page 4, Line 1)	10,348,047
(2)	Current Agents' Balances (Page 2, Lines 13.1+13.2)	2,048,387
(3)	Prior Agents' Balances (Page 2, Lines 13.1+13.2)	2,050,572
(4)	Mean Agents' Balances [(2) + (3)] / 2	2,049,479
(5)	Average Agents' Balances Percentage (4) / (1)	<u>19.8%</u>

- Item C.1 The expected incurred loss & loss adjustment expense ratio is the complement of the Prepaid Expense Ratio, Item B.2.a.5, minus Contingent Commissions, 50% of General Expenses and a Profit & Contingencies Provision (5.0%).
- Item C.2 The average direct reserve to incurred ratio is based on the following information (excluding unallocated loss adjustment expense) from the Federal Combined Annual Statement (Page 15) for Commercial Auto Liability excluding the Mandated Department):

Dollars	s in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Incurred Losses and ALAE	88,472	102,820	105,840
(2)	Current Unpaid Losses and ALAE	219,962	230,966	240,424
(3)	Prior Unpaid Losses and ALAE	215,710	219,961	230,966
(4)	Mean Loss and ALAE Reserves [(2) + (3)] / 2	217,836	225,463	235,695
(5)	Ratio (4) / (1)	2.462	2.193	2.227
(6)	Selected Reserve to Incurred Ratio	2.294		
(7)	Estimated Reserve Discount	5.3%		
(8)	Federal Taxes Payable (% of Reserve): (7) x 0.35	1.9%		
(9)	(6) x [(1.000 - (8)]	<u>2.251</u>		

The average rate of return on invested assets is based on the following Countrywide information for all lines of business from the Federal Combined Annual Statement.

Dolla	rs in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Net Investment Income earned (Page 4, Line 9)	1,186,079	992,121	1,071,444
(2)	Cash and Invested Assets (Page 2, Line 10)	34,771,379	35,423,377	35,351,062
(3)	Rate of Return Percentage (1) / (2)	3.4%	2.8%	3.0%
(4)	Selected Rate of Return Percentage	<u>3.5%</u>		

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

Premium to Surplus Ratio Commercial Auto Liability (\$000s)

	All Lines						(Commercial	Auto Liabili	ty	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		Mean Net			(3)/[(1)+(2)+(4)]		Mean Net			(5)x[(6)+(7)+(8)]	(9)/(10)
	Mean Net	Unearned		Net		Mean Net	Unearned	Net	Net		
	Loss & LAE	Premium	Mean	Earned	Surplus	Loss & LAE	Premium	Earned	Written	Allocated	Premium/
Year	Reserve	Reserve	Surplus	Premium	Ratio	Reserve	Reserve	Premium	Premium	Surplus	Surplus
2011	17,339,812	4,779,345	14,012,404	9,083,104	0.449	252,823	72,142	150,625	149,387	213,579	0.699
2012	17,742,190	4,841,630	13,774,281	9,327,395	0.432	242,209	73,635	153,521	157,745	202,598	0.779
2013	17,637,391	4,911,593	14,291,164	9,604,173	0.444	246,588	74,898	161,559	159,862	214,699	0.745
2014	17,286,993	5,072,963	14,784,847	9,894,077	0.458	253,249	77,770	163,300	170,741	226,589	0.754
2015	17,303,625	5,226,299	14,053,544	10,348,047	0.427	263,305	84,597	178,575	184,785	225,040	0.821

5 Year Average 0.760

Selected: 0.800

Source:

- (1), (6) Underwriting and Investment Exhibit Part 2A; Page 10, Column 8 and 9 (Average of Current and Prior year)
- (2), (7) Underwriting and Investment Exhibit Part 1A; Page 7, Column 5 (Average of Current and Prior Year)
- (3) Underwriting and Investment Exhibit Statement of Income; Page 4, Column 1, Line 38 (Average of Current and Prior Year)
- (4), (8) Underwriting and Investment Exhibit Part 1; Page 6, Column 4
- (9) Underwriting and Investment Exhibit Part 1 Page 6, Column 1

Vigilant Insurance Company

62.7%

State of Dist Of Columbia Underwriting Expense Provisions Commercial Auto Physical Damage

	Countrywide				
-			•	3 Year	
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>	
Total Commissions	14.7%	14.6%	14.4%	14.5%	
Other Acquisition Expense	11.5%	10.1%	10.4%	10.7%	
General Expenses	2.9%	2.6%	2.7%	2.7%	
Taxes, Licenses, & Fees	2.3%	2.1%	2.1%	2.2%	
Total Expense Provisions	31.5%	29.4%	29.5%	30.1%	
_		Dist of C	Columbia		
				3 Year	
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>	
Regular Commissions	11.4%	12.0%	12.0%	11.8%	
Contingent Commissions	0.6%	1.1%	1.2%	1.0%	
Total Commissions	12.0%	13.1%	13.2%	12.8%	
Other Acquisition Expense	11.5%	10.1%	10.4%	10.7%	
General Expenses	2.9%	2.6%	2.7%	2.7%	
Taxes, Licenses, & Fees	2.1%	2.1%	2.1%	2.1%	
Total Expense Provisions	28.6%	27.9%	28.3%	28.3%	
			Dist	of Columbia	
A. Underwriting Expense Provisions				28.3%	
B. Underwriting Profit and Contingencies	S			9.0%	
C. Total Underwriting Provisions				37.3%	

<u>Notes</u>

D. Expected Loss & LAE Ratio

- The state-specific ratios are from the Direct Page 15 Federal Combined Annual Statement. Countrywide ratios are from the Federal Combined IEE.
- All ratios are to earned premium except commissions and taxes, licenses, and fees, which are to written premium.

Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

State of Dist Of Columbia Commercial Auto Physical Damage

Return on Equity Calculation

For the purposes of these requirements, we have calculated an expected after-tax return on equity as follows:

$$ROE = \{[(UW + II) * PS] + YS\} * (1.000 - TX)$$

where:

ROE = Return on equity, after federal income taxes (See Historic Return on Equity Exhibit)

UW = Underwriting profit, as a percentage of premium

II = Investment income on policyholder funds, as a percentage of premium (See Investment Income Offset Exhibit)

PS = Premium to surplus ratio (See Premium to Surplus Ratio Exhibit)

YS = Investment income on surplus, as a percentage of surplus

(See Historic Investment Income Yield Exhibit)

TX = Effective Federal Income Tax rate (See Income Tax Exhibit)

We selected an underwriting profit provision of 9.0% This implies an after-tax return on equity of 15.0%

$$ROE = \{[(9.0\% + 0.9\%) * 1.500] + 3.5\%\} * (1 - 18.0\%) = 15.0\%$$

These returns are consistent with both our historic returns as shown in the Historic Return on Equity exhibit.

Commercial Auto Physical Damage State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

A.	. Direct Earned Premiums for Calendar Year 2015 (see Sheet 2) 220,835					
В.	Une	arne	d Premium Reserve Subject to Investment (see Sheet 2)			
	Mean Unearned Premium Reserve for Calendar Year 2015					
		a. b. c.	Unearned Premium Reserve as of 12/31/2015 Unearned Premium Reserve as of 12/31/2014 Mean Unearned Premium Reserve (a + b) / 2	107,077 103,902 105,490		
	2.					
		a.	Prepaid Expense Provisions: (1) Commissions & Brokerage (excluding Contingent) (2) Other Acquisition Expenses (3) 50% of General Expenses (4) Taxes, Licenses, & Fees (5) Total	11.8% 10.7% 1.4% 2.1% 26.0%		
		b.	Deduction for Prepaid Expenses (B.1.c x B.2.a.(5))	27,375		
	3.	7,384				
	4.	De	duction for Delayed Remission of Premiums			
		a. b.	Average Agents' Balances Percentage (see Sheet 2) Delayed Remission of Premiums (A x B.4.a)	19.8% 43,737		
	5.	Ne	t Unearned Premium Reserve Subject to Investment (B.1.c - B.2.b - B.3 - B.4.b)	26,994		
C.	Loss	Res	serves Subject to Investment (see Sheet 2)			
	1.	Exp	pected Incurred Loss & Loss Adjustment Expense Ratio	63.7%		
	2.	Ave	erage Reserve to Incurred Ratio	0.221		
	3.	Exp	pected Mean Loss and Loss Adjustment Expense Reserve (A x C.1 x C.2)	31,088		
D.	Net	Subje	ect to Investment (B.5 + C.3)	58,082		
E.	Average Rate of Return on Invested Assets (see Sheet 3) 3.5%					
F.	Ехр	ectec	I Investment Earnings (D x E)	2,033		
G.		Ratio of Investment Earnings to Earned Premium (F / A) (equals Investment Income Offset)				

Commercial Auto Physical Damage State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

- Item A 'Direct Earned premiums are from the Federal Combined Annual Statement for Commercial Auto Physical Damage: (Page 15 Line 21.2).
- Item B.1 Direct Unearned Premiums are from the Federal Combined Annual Statement for Commercial Auto Physical Damage: (Page 15 Line 21.2).
- Item B.2 Production costs and a significant portion of other underwriting expenses (excluding loss adjustment expenses) are incurred as soon as the policy is written and before the premium is earned. As a result, these monies are not available for investment.
- Item B.3 The Tax Reform Act of 1986 taxes 20% of the unearned premium reserve. At a corporate tax rate of 35%, this tax equals 7.0% (.20 x .35 = .07) of the unearned premium reserve. As a result, these monies are not available for investment.
- Item B.4 The average agents' balances percentage is based on the following information for all lines of business from the Federal Combined Annual Statement:

Dolla	<u>rs in Thousands</u>	<u>2015</u>
(1)	Net Earned Premium (Page 4, Line 1)	10,348,047
(2)	Current Agents' Balances (Page 2, Lines 13.1+13.2)	2,048,387
(3)	Prior Agents' Balances (Page 2, Lines 13.1+13.2)	2,050,572
(4)	Mean Agents' Balances [(2) + (3)] / 2	2,049,479
(5)	Average Agents' Balances Percentage (4) / (1)	<u>19.8%</u>

- Item C.1 The expected incurred loss & loss adjustment expense ratio is the complement of the Prepaid Expense Ratio, Item B.2.a.5, minus Contingent Commissions, 50% of General Expenses and a Profit & Contingencies Provision (8.0%).
- Item C.2 The average direct reserve to incurred ratio is based on the following information (excluding unallocated loss adjustment expense) from the Federal Combined Annual Statement (Page 15) for Commercial Auto Physical Damage excluding the Mandated Department):

Dollars	s in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Incurred Losses and ALAE	21,468	25,033	28,075
(2)	Current Unpaid Losses and ALAE	4,919	5,713	6,102
(3)	Prior Unpaid Losses and ALAE	5,572	4,919	5,713
(4)	Mean Loss and ALAE Reserves [(2) + (3)] / 2	5,245	5,316	5,907
(5)	Ratio (4) / (1)	0.244	0.212	0.210
(6)	Selected Reserve to Incurred Ratio	0.222		
(7)	Estimated Reserve Discount	1.3%		
(8)	Federal Taxes Payable (% of Reserve): (7) x 0.35	0.5%		
(9)	(6) x [(1.000 - (8)]	<u>0.221</u>		

The average rate of return on invested assets is based on the following Countrywide information for all lines of business from the Federal Combined Annual Statement.

Dolla	rs in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Net Investment Income earned (Page 4, Line 9)	1,186,079	992,121	1,071,444
(2)	Cash and Invested Assets (Page 2, Line 10)	34,771,379	35,423,377	35,351,062
(3)	Rate of Return Percentage (1) / (2)	3.4%	2.8%	3.0%
(4)	Selected Rate of Return Percentage	3.5%		

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

Premium to Surplus Ratio Commercial Auto Physical Damage (\$000s)

	All Lines					Comr	nercial Auto	Physical D	amage		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		Mean Net			(3)/[(1)+(2)+(4)]		Mean Net			(5)x[(6)+(7)+(8)]	(9)/(10)
	Mean Net	Unearned		Net		Mean Net	Unearned	Net	Net		
	Loss & LAE	Premium	Mean	Earned	Surplus	Loss & LAE	Premium	Earned	Written	Allocated	Premium/
Year	Reserve	Reserve	Surplus	Premium	Ratio	Reserve	Reserve	Premium	Premium	Surplus	Surplus
2011	17,339,812	4,779,345	14,012,404	9,083,104	0.449	5,850	20,647	42,020	41,139	30,769	1.337
2012	17,742,190	4,841,630	13,774,281	9,327,395	0.432	3,759	20,194	42,773	42,746	28,801	1.484
2013	17,637,391	4,911,593	14,291,164	9,604,173	0.444	3,019	20,262	42,408	42,580	29,196	1.458
2014	17,286,993	5,072,963	14,784,847	9,894,077	0.458	3,396	21,106	44,071	45,597	31,433	1.451
2015	17,303,625	5,226,299	14,053,544	10,348,047	0.427	4,890	22,828	48,413	50,326	32,541	1.547

5 Year Average 1.460

Selected: 1.500

Source:

- (1), (6) Underwriting and Investment Exhibit Part 2A; Page 10, Column 8 and 9 (Average of Current and Prior year)
- (2), (7) Underwriting and Investment Exhibit Part 1A; Page 7, Column 5 (Average of Current and Prior Year)
- (3) Underwriting and Investment Exhibit Statement of Income; Page 4, Column 1, Line 38 (Average of Current and Prior Year)
- (4), (8) Underwriting and Investment Exhibit Part 1; Page 6, Column 4
- (9) Underwriting and Investment Exhibit Part 1 Page 6, Column 1

Historic Return on Equity

(1)	(2)	(3)	(4)	(5) Pre-Tax	(6) After-Tax			
	Pre-Tax	After-Tax		Return on	Return on			
Calendar	Net Income	Net Income	Surplus	Equity	Equity			
Year	in (\$000s)	in (\$000s)	in (\$000s)	(2)/(4)	(3)/(4)			
0004	4 740 005	4 007 007	7 704 005	00.40/	47.00/			
2004	1,740,395	1,367,867	7,764,265	22.4%	17.6%			
2005	2,049,343	1,673,496	8,833,290	23.2%	18.9%			
2006	2,846,288	2,157,507	11,277,248	25.2%	19.1%			
2007	3,512,788	2,652,763	12,877,458	27.3%	20.6%			
2008	1,933,057	1,507,183	12,105,466	16.0%	12.5%			
2009	2,505,943	1,986,000	14,321,521	17.5%	13.9%			
2010	2,581,204	2,165,817	14,317,263	18.0%	15.1%			
2011	2,024,179	1,785,078	13,707,546	14.8%	13.0%			
2012	1,905,424	1,660,628	13,841,016	13.8%	12.0%			
2013	3,051,140	2,361,783	14,741,312	20.7%	16.0%			
2014	2,590,004	2,058,273	14,828,383	17.5%	13.9%			
2015	2,954,090	2,403,203	13,278,705	22.2%	18.1%			
Ctual whit area		:			15.8%			
Straight ave	Straight average, excluding highest and lowest							
5 Year Aver	5 Year Average							
Selected Af	Selected After-tax Rate of Return on Equity							

Source:

- (2) Line 18, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement
- (3) Line 20, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement
- (4) Line 38, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement

Exhibit 4.5

Effective Income Tax Rate

(1)	(2)	(3)	(4)	(5)
Calendar Year	Pre-Tax Net Income in (\$000s)	After-Tax Net Income in (\$000s)	Tax Withholdings (2) - (3)	Effective Tax Rate (4)/(2)
2011	2.024.179	1.785.078	239.101	11.8%
2012	1.905.424	1,660,628	244.796	12.8%
2013	3.051.140	2,361,783	689.357	22.6%
2014	2.590.004	2,058,273	531.731	20.5%
2015	2,954,090	2,403,203	550,887	18.6%
5 Yr Total	12,524,837	10,268,966	2,255,872	18.0%
		Selected Effective	ve Income Tax rate	18.0%

Source:

⁽²⁾ Line 18, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement

⁽³⁾ Line 20, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement

Historic Investment Income Yields

	(1)	(2)	(3)
	Net		
	Investment	Cash &	Investment
	Income	Invested	Income
	Earned	Assets	Yield
Year	(AS Pg 4, Ln 9)	(AS Pg 2, Ln 10)	(1) / (2)
2011	1,509,849	33,813,671	4.5%
2012	1,306,932	34,473,281	3.8%
2013	1,186,079	34,771,379	3.4%
2014	992,121	35,423,377	2.8%
2015	1,071,444	35,351,062	3.0%
ear Averac	10		3.5%
cai /weiag	,		3.370
lected Inve	estment Income Yield		3.5%

Exhibit 5

Commercial Auto Filing

Federal Insurance Company
Great Northern Insurance Company
Pacific Indemnity Company
Vigilant Insurance Company

DISTRICT OF COLUMBIA

Earned Exposures

Year	Liability	Physical Damage
2011	430	239
2012	454	250
2013	409	278
2014	399	336
2015	439	360

Cumulative ISO Loss Costs Changes Since Chubb's Last Loss Costs Adoption

Loss Costs Filing LI-CA-2015-060, Approval Circular LI-CA-2015-074 *Based on Chubb's 2015 Written Premium Distribution

		(1)	(2)	(3)	(4)	(5)
						(1+(3))x(1+(4))-1
			LI-CA-2015-060	Combined		
		**************************************	Approved	Approved	3.6 14. 11	CI 11
COMMEDIA	LCADG	Written	ISO 10/1/2015	ISO LC	Multiplier	Chubb
COMMERCIA		Premium	LC Change	<u>Change</u>	Change^	Effect 5.00/
Liability	Non-PIP	685,025	-5.0%	-5.0%	0.0%	-5.0%
	PIP	12,448	0.0%	0.0%	0.0%	0.0%
DI D	UM	52,227	0.0%	0.0%	0.0%	0.0%
Phys Damage	Comprehensive	52,315	0.0%	0.0%	0.0%	0.0%
	Collision	61,619	7.0%	7.0%	0.0%	7.0%
Total Liability		749,700	-4.6%	-4.6%	0.0%	-4.6%
Total Physical l	Damage	113,934	3.8%	3.8%	0.0%	3.8%
Total Commerc	ial Cars	863,634	-3.5%	-3.5%	0.0%	-3.5%
PRIVATE PAS	SENGER TYPES					
Liability	Non-PIP	322,330	0.0%	0.0%	0.0%	0.0%
Ž	PIP	5,857	0.0%	0.0%	0.0%	0.0%
	UM	24,575	0.0%	0.0%	0.0%	0.0%
Phys Damage	Comprehensive	23,729	0.0%	0.0%	0.0%	0.0%
, ,	Collision	63,784	8.1%	8.1%	0.0%	8.1%
Total Liability		352,762	0.0%	0.0%	0.0%	0.0%
Total Physical I	Damage	87,513	5.9%	5.9%	0.0%	5.9%
Total Private Pa	assenger Types	440,275	1.2%	1.2%	0.0%	1.2%
GARAGES						
Liability	Non-PIP	0	0.0%	0.0%	0.0%	0.0%
21401111	PIP	0	0.0%	0.0%	0.0%	0.0%
Phys Damage	Dealers					
Thys Duniage	Comprehensive	7,502	0.0%	0.0%	0.0%	0.0%
	Collision	7,439	0.0%	0.0%	0.0%	0.0%
	Garage Keepers	.,		0.0,0		0.0,0
	Comprehensive	3,751	0.0%	0.0%	0.0%	0.0%
	Collision	3,720	0.0%	0.0%	0.0%	0.0%
Total Liability		0	0.0%	0.0%	0.0%	0.0%
Total Physical I	Damage	22,411	0.0%	0.0%	0.0%	0.0%
1 otal 1 lly sloui 1	Sumage	22,111	0.070	0.070	0.070	0.070
Total Garages		22,411	0.0%	0.0%	0.0%	0.0%
RATE CHANGE	E FOR ALL TYPES					
Total Liability		1,102,462	-3.1%	-3.1%	0.0%	-3.1% *
Total Physical I	Damage	223,858	4.2%	4.2%	0.0%	4.2%
Total		1,326,320	-1.9%	-1.9%	0.0%	-1.9%

[^]Based upon no change from current liability multiplier of 3.101 and physical damage multiplier of 2.416.

Derivation of the Needed Loss Costs Modification

(1)	(2)	(3)	(4)	
		Derived	Needed	
	Expected	Loss	Loss	
	Loss	Costs	Costs	
Coverage	Ratio	Multiplier*	Modification	
Liability	56.4%	3.101	74.90%	
Physical Damage	62.7%	2.416	51.48%	

^{*} Please see the attached Exhibit 1 for detail on the loss costs multiplier change. The derived loss costs multipliers achieve the needed rate change for which we are applying; please refer to the attached Exhibits 2.1 and 2.p which show the rate indications for commercial auto liability and physical damage, respectively.

56.4%

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

State of Dist Of Columbia Underwriting Expense Provisions Commercial Auto Liability

	Count	rywide	
			3 Year
<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>
14.1%	14.5%	14.8%	14.5%
12.0%	10.9%	10.8%	11.2%
4.1%	3.8%	3.8%	3.9%
2.6%	2.6%	2.4%	2.5%
32.8%	31.7%	31.8%	32.1%
	Dist of C	Columbia	
			3 Year
<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>
11.7%	12.6%	12.3%	12.2%
0.9%	1.0%	1.0%	1.0%
12.6%	13.6%	13.3%	13.2%
12.0%	10.9%	10.8%	11.2%
	3.8%	3.8%	3.9%
2.3%	2.2%	2.2%	2.2%
31.0%	30.4%	30.1%	30.5%
		Diet	of Columbia
		Dist	30.5%
S			13.1%
			43.6%
	14.1% 12.0% 4.1% 2.6% 32.8% 2013 11.7% 0.9% 12.6% 12.0% 4.1% 2.3% 31.0%	2013 2014 14.1% 14.5% 12.0% 10.9% 4.1% 3.8% 2.6% 2.6% 32.8% 31.7% Dist of C 2013 2014 11.7% 12.6% 0.9% 1.0% 12.6% 13.6% 12.0% 10.9% 4.1% 3.8% 2.3% 2.2% 31.0% 30.4%	14.1% 14.5% 14.8% 12.0% 10.9% 10.8% 4.1% 3.8% 3.8% 2.6% 2.4% 32.8% 31.7% 31.8% Dist of Columbia 2013 2014 2015 11.7% 12.6% 12.3% 0.9% 1.0% 1.0% 12.6% 13.6% 13.3% 12.0% 10.9% 10.8% 4.1% 3.8% 3.8% 2.3% 2.2% 2.2% 31.0% 30.4% 30.1% Dist Dist Dist Dist Dist

Notes

D. Expected Loss & LAE Ratio

- The state-specific ratios are from the Direct Page 15 Federal Combined Annual Statement. Countrywide ratios are from the Federal Combined IEE.
- All ratios are to earned premium except commissions and taxes, licenses, and fees, which are to written premium.

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

State of Dist Of Columbia Commercial Auto Liability

Return on Equity Calculation

For the purposes of these requirements, we have calculated an expected after-tax return on equity as follows:

$$ROE = \{[(UW + II) * PS] + YS\} * (1.000 - TX)$$

where:

ROE = Return on equity, after federal income taxes (See Historic Return on Equity Exhibit)

UW = Underwriting profit, as a percentage of premium

II = Investment income on policyholder funds, as a percentage of premium (See Investment Income Offset Exhibit)

PS = Premium to surplus ratio (See Premium to Surplus Ratio Exhibit)

YS = Investment income on surplus, as a percentage of surplus

(See Historic Investment Income Yield Exhibit)

TX = Effective Federal Income Tax rate (See Income Tax Exhibit)

We selected an underwriting profit provision of 13.1% This implies an after-tax return on equity of 15.0%

$$ROE = \{[(13.1\% + 5.4\%) * 0.800] + 3.5\%\} * (1 - 18.0\%) = 15.0\%$$

These returns are consistent with both our historic returns as shown in the Historic Return on Equity exhibit.

Exhibit 4.2 AUTO-L Sheet 1

Commercial Auto Liability State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

A.	Direct Earned Premiums for Calendar Year 2015 (see Sheet 2) 1,1					
В.	Une	earned Premium Reserve Subject to Investment (see Sheet 2)				
	1.	Mean Unearned Premium Reserve for Calendar Year 2015				
		 a. Unearned Premium Reserve as of 12/31/2015 b. Unearned Premium Reserve as of 12/31/2014 c. Mean Unearned Premium Reserve (a + b) / 2 	489,360 508,845 499,103			
	2.	Deduction for Prepaid Expenses				
		 a. Prepaid Expense Provisions: (1) Commissions & Brokerage (excluding Contingent) (2) Other Acquisition Expenses (3) 50% of General Expenses (4) Taxes, Licenses, & Fees (5) Total 	12.2% 11.2% 2.0% 2.2% 27.6%			
		b. Deduction for Prepaid Expenses (B.1.c x B.2.a.(5))	137,503			
	3.	Deduction for Federal Taxes Payable (B.1.c x 7.0%) (see Sheet 2)	34,937			
	4.	Deduction for Delayed Remission of Premiums				
		a. Average Agents' Balances Percentage (see Sheet 2)b. Delayed Remission of Premiums (A x B.4.a)	19.8% 222,274			
	5.	Net Unearned Premium Reserve Subject to Investment (B.1.c - B.2.b - B.3 - B.4.b)	104,389			
C.	Loss	s Reserves Subject to Investment (see Sheet 2)				
	1.	Expected Incurred Loss & Loss Adjustment Expense Ratio	64.5%			
	2.	Average Reserve to Incurred Ratio	2.251			
	3.	Expected Mean Loss and Loss Adjustment Expense Reserve (A x C.1 x C.2)	1,629,444			
D.	Net	Subject to Investment (B.5 + C.3)	1,733,833			
E.	Average Rate of Return on Invested Assets (see Sheet 3) 3.5%					
F.	Expected Investment Earnings (D x E) 60,684					
G.		Ratio of Investment Earnings to Earned Premium (F / A) (equals Investment Income Offset) 5.4%				

Commercial Auto Liability State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

- Item A 'Direct Earned premiums are from the Federal Combined Annual Statement for Commercial Auto Liability: (Page 15 Line 19.3, 19.4).
- Item B.1 Direct Unearned Premiums are from the Federal Combined Annual Statement for Commercial Auto Liability: (Page 15 Line 19.3, 19.4).
- Item B.2 Production costs and a significant portion of other underwriting expenses (excluding loss adjustment expenses) are incurred as soon as the policy is written and before the premium is earned. As a result, these monies are not available for investment.
- Item B.3 The Tax Reform Act of 1986 taxes 20% of the unearned premium reserve. At a corporate tax rate of 35%, this tax equals 7.0% ($.20 \times .35 = .07$) of the unearned premium reserve. As a result, these monies are not available for investment.
- Item B.4 The average agents' balances percentage is based on the following information for all lines of business from the Federal Combined Annual Statement:

Dolla	<u>rs in Thousands</u>	<u>2015</u>
(1)	Net Earned Premium (Page 4, Line 1)	10,348,047
(2)	Current Agents' Balances (Page 2, Lines 13.1+13.2)	2,048,387
(3)	Prior Agents' Balances (Page 2, Lines 13.1+13.2)	2,050,572
(4)	Mean Agents' Balances [(2) + (3)] / 2	2,049,479
(5)	Average Agents' Balances Percentage (4) / (1)	<u>19.8%</u>

- Item C.1 The expected incurred loss & loss adjustment expense ratio is the complement of the Prepaid Expense Ratio, Item B.2.a.5, minus Contingent Commissions, 50% of General Expenses and a Profit & Contingencies Provision (5.0%).
- Item C.2 The average direct reserve to incurred ratio is based on the following information (excluding unallocated loss adjustment expense) from the Federal Combined Annual Statement (Page 15) for Commercial Auto Liability excluding the Mandated Department):

Dollars	s in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Incurred Losses and ALAE	88,472	102,820	105,840
(2)	Current Unpaid Losses and ALAE	219,962	230,966	240,424
(3)	Prior Unpaid Losses and ALAE	215,710	219,961	230,966
(4)	Mean Loss and ALAE Reserves [(2) + (3)] / 2	217,836	225,463	235,695
(5)	Ratio (4) / (1)	2.462	2.193	2.227
(6)	Selected Reserve to Incurred Ratio	2.294		
(7)	Estimated Reserve Discount	5.3%		
(8)	Federal Taxes Payable (% of Reserve): (7) x 0.35	1.9%		
(9)	(6) x [(1.000 - (8)]	<u>2.251</u>		

The average rate of return on invested assets is based on the following Countrywide information for all lines of business from the Federal Combined Annual Statement.

Dolla	rs in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Net Investment Income earned (Page 4, Line 9)	1,186,079	992,121	1,071,444
(2)	Cash and Invested Assets (Page 2, Line 10)	34,771,379	35,423,377	35,351,062
(3)	Rate of Return Percentage (1) / (2)	3.4%	2.8%	3.0%
(4)	Selected Rate of Return Percentage	<u>3.5%</u>		

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

Premium to Surplus Ratio Commercial Auto Liability (\$000s)

			All Lines				(Commercial	Auto Liabili	ty	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		Mean Net			(3)/[(1)+(2)+(4)]		Mean Net			(5)x[(6)+(7)+(8)]	(9)/(10)
	Mean Net	Unearned		Net		Mean Net	Unearned	Net	Net		
	Loss & LAE	Premium	Mean	Earned	Surplus	Loss & LAE	Premium	Earned	Written	Allocated	Premium/
Year	Reserve	Reserve	Surplus	Premium	Ratio	Reserve	Reserve	Premium	Premium	Surplus	Surplus
2011	17,339,812	4,779,345	14,012,404	9,083,104	0.449	252,823	72,142	150,625	149,387	213,579	0.699
2012	17,742,190	4,841,630	13,774,281	9,327,395	0.432	242,209	73,635	153,521	157,745	202,598	0.779
2013	17,637,391	4,911,593	14,291,164	9,604,173	0.444	246,588	74,898	161,559	159,862	214,699	0.745
2014	17,286,993	5,072,963	14,784,847	9,894,077	0.458	253,249	77,770	163,300	170,741	226,589	0.754
2015	17,303,625	5,226,299	14,053,544	10,348,047	0.427	263,305	84,597	178,575	184,785	225,040	0.821

5 Year Average 0.760

Selected: 0.800

Source:

- (1), (6) Underwriting and Investment Exhibit Part 2A; Page 10, Column 8 and 9 (Average of Current and Prior year)
- (2), (7) Underwriting and Investment Exhibit Part 1A; Page 7, Column 5 (Average of Current and Prior Year)
- (3) Underwriting and Investment Exhibit Statement of Income; Page 4, Column 1, Line 38 (Average of Current and Prior Year)
- (4), (8) Underwriting and Investment Exhibit Part 1; Page 6, Column 4
- (9) Underwriting and Investment Exhibit Part 1 Page 6, Column 1

Vigilant Insurance Company

62.7%

State of Dist Of Columbia Underwriting Expense Provisions Commercial Auto Physical Damage

		Count	rywide	
-			•	3 Year
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>
Total Commissions	14.7%	14.6%	14.4%	14.5%
Other Acquisition Expense	11.5%	10.1%	10.4%	10.7%
General Expenses	2.9%	2.6%	2.7%	2.7%
Taxes, Licenses, & Fees	2.3%	2.1%	2.1%	2.2%
Total Expense Provisions	31.5%	29.4%	29.5%	30.1%
_		Dist of C	Columbia	
				3 Year
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Avg.</u>
Regular Commissions	11.4%	12.0%	12.0%	11.8%
Contingent Commissions	0.6%	1.1%	1.2%	1.0%
Total Commissions	12.0%	13.1%	13.2%	12.8%
Other Acquisition Expense	11.5%	10.1%	10.4%	10.7%
General Expenses	2.9%	2.6%	2.7%	2.7%
Taxes, Licenses, & Fees	2.1%	2.1%	2.1%	2.1%
Total Expense Provisions	28.6%	27.9%	28.3%	28.3%
			Dist	of Columbia
A. Underwriting Expense Provisions				28.3%
B. Underwriting Profit and Contingencies	S			9.0%
C. Total Underwriting Provisions				37.3%

<u>Notes</u>

D. Expected Loss & LAE Ratio

- The state-specific ratios are from the Direct Page 15 Federal Combined Annual Statement. Countrywide ratios are from the Federal Combined IEE.
- All ratios are to earned premium except commissions and taxes, licenses, and fees, which are to written premium.

Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

State of Dist Of Columbia Commercial Auto Physical Damage

Return on Equity Calculation

For the purposes of these requirements, we have calculated an expected after-tax return on equity as follows:

$$ROE = \{[(UW + II) * PS] + YS\} * (1.000 - TX)$$

where:

ROE = Return on equity, after federal income taxes (See Historic Return on Equity Exhibit)

UW = Underwriting profit, as a percentage of premium

II = Investment income on policyholder funds, as a percentage of premium (See Investment Income Offset Exhibit)

PS = Premium to surplus ratio (See Premium to Surplus Ratio Exhibit)

YS = Investment income on surplus, as a percentage of surplus

(See Historic Investment Income Yield Exhibit)

TX = Effective Federal Income Tax rate (See Income Tax Exhibit)

We selected an underwriting profit provision of 9.0% This implies an after-tax return on equity of 15.0%

$$ROE = \{[(9.0\% + 0.9\%) * 1.500] + 3.5\%\} * (1 - 18.0\%) = 15.0\%$$

These returns are consistent with both our historic returns as shown in the Historic Return on Equity exhibit.

Commercial Auto Physical Damage State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

A.	Dire	ct Ea	arned Premiums for Calendar Year 2015 (see Sheet 2)	220,835
В.	Une	arne	d Premium Reserve Subject to Investment (see Sheet 2)	
	1.	Me	an Unearned Premium Reserve for Calendar Year 2015	
		a. b. c.	Unearned Premium Reserve as of 12/31/2015 Unearned Premium Reserve as of 12/31/2014 Mean Unearned Premium Reserve (a + b) / 2	107,077 103,902 105,490
	2.	De	duction for Prepaid Expenses	
		a.	Prepaid Expense Provisions: (1) Commissions & Brokerage (excluding Contingent) (2) Other Acquisition Expenses (3) 50% of General Expenses (4) Taxes, Licenses, & Fees (5) Total	11.8% 10.7% 1.4% 2.1% 26.0%
		b.	Deduction for Prepaid Expenses (B.1.c x B.2.a.(5))	27,375
	3.	De	duction for Federal Taxes Payable (B.1.c x 7.0%) (see Sheet 2)	7,384
	4.	De	duction for Delayed Remission of Premiums	
		a. b.	Average Agents' Balances Percentage (see Sheet 2) Delayed Remission of Premiums (A x B.4.a)	19.8% 43,737
	5.	Ne	t Unearned Premium Reserve Subject to Investment (B.1.c - B.2.b - B.3 - B.4.b)	26,994
C.	Loss	Res	serves Subject to Investment (see Sheet 2)	
	1.	Exp	pected Incurred Loss & Loss Adjustment Expense Ratio	63.7%
	2.	Ave	erage Reserve to Incurred Ratio	0.221
	3.	Exp	pected Mean Loss and Loss Adjustment Expense Reserve (A x C.1 x C.2)	31,088
D.	Net	Subje	ect to Investment (B.5 + C.3)	58,082
E.	Ave	rage	Rate of Return on Invested Assets (see Sheet 3)	3.5%
F.	Ехр	ectec	I Investment Earnings (D x E)	2,033
G.			nvestment Earnings to Earned Premium (F / A) nvestment Income Offset)	0.9%

Commercial Auto Physical Damage State of Dist Of Columbia

CALCULATION OF INVESTMENT INCOME OFFSET

- Item A 'Direct Earned premiums are from the Federal Combined Annual Statement for Commercial Auto Physical Damage: (Page 15 Line 21.2).
- Item B.1 Direct Unearned Premiums are from the Federal Combined Annual Statement for Commercial Auto Physical Damage: (Page 15 Line 21.2).
- Item B.2 Production costs and a significant portion of other underwriting expenses (excluding loss adjustment expenses) are incurred as soon as the policy is written and before the premium is earned. As a result, these monies are not available for investment.
- Item B.3 The Tax Reform Act of 1986 taxes 20% of the unearned premium reserve. At a corporate tax rate of 35%, this tax equals 7.0% (.20 x .35 = .07) of the unearned premium reserve. As a result, these monies are not available for investment.
- Item B.4 The average agents' balances percentage is based on the following information for all lines of business from the Federal Combined Annual Statement:

Dolla	<u>rs in Thousands</u>	<u>2015</u>
(1)	Net Earned Premium (Page 4, Line 1)	10,348,047
(2)	Current Agents' Balances (Page 2, Lines 13.1+13.2)	2,048,387
(3)	Prior Agents' Balances (Page 2, Lines 13.1+13.2)	2,050,572
(4)	Mean Agents' Balances [(2) + (3)] / 2	2,049,479
(5)	Average Agents' Balances Percentage (4) / (1)	<u>19.8%</u>

- Item C.1 The expected incurred loss & loss adjustment expense ratio is the complement of the Prepaid Expense Ratio, Item B.2.a.5, minus Contingent Commissions, 50% of General Expenses and a Profit & Contingencies Provision (8.0%).
- Item C.2 The average direct reserve to incurred ratio is based on the following information (excluding unallocated loss adjustment expense) from the Federal Combined Annual Statement (Page 15) for Commercial Auto Physical Damage excluding the Mandated Department):

Dollars	s in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Incurred Losses and ALAE	21,468	25,033	28,075
(2)	Current Unpaid Losses and ALAE	4,919	5,713	6,102
(3)	Prior Unpaid Losses and ALAE	5,572	4,919	5,713
(4)	Mean Loss and ALAE Reserves [(2) + (3)] / 2	5,245	5,316	5,907
(5)	Ratio (4) / (1)	0.244	0.212	0.210
(6)	Selected Reserve to Incurred Ratio	0.222		
(7)	Estimated Reserve Discount	1.3%		
(8)	Federal Taxes Payable (% of Reserve): (7) x 0.35	0.5%		
(9)	(6) x [(1.000 - (8)]	<u>0.221</u>		

The average rate of return on invested assets is based on the following Countrywide information for all lines of business from the Federal Combined Annual Statement.

Dolla	rs in Thousands	<u>2013</u>	<u>2014</u>	<u>2015</u>
(1)	Net Investment Income earned (Page 4, Line 9)	1,186,079	992,121	1,071,444
(2)	Cash and Invested Assets (Page 2, Line 10)	34,771,379	35,423,377	35,351,062
(3)	Rate of Return Percentage (1) / (2)	3.4%	2.8%	3.0%
(4)	Selected Rate of Return Percentage	3.5%		

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

Premium to Surplus Ratio Commercial Auto Physical Damage (\$000s)

			All Lines				Comr	nercial Auto	Physical D	amage	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		Mean Net			(3)/[(1)+(2)+(4)]		Mean Net			(5)x[(6)+(7)+(8)]	(9)/(10)
	Mean Net	Unearned		Net		Mean Net	Unearned	Net	Net		
	Loss & LAE	Premium	Mean	Earned	Surplus	Loss & LAE	Premium	Earned	Written	Allocated	Premium/
Year	Reserve	Reserve	Surplus	Premium	Ratio	Reserve	Reserve	Premium	Premium	Surplus	Surplus
2011	17,339,812	4,779,345	14,012,404	9,083,104	0.449	5,850	20,647	42,020	41,139	30,769	1.337
2012	17,742,190	4,841,630	13,774,281	9,327,395	0.432	3,759	20,194	42,773	42,746	28,801	1.484
2013	17,637,391	4,911,593	14,291,164	9,604,173	0.444	3,019	20,262	42,408	42,580	29,196	1.458
2014	17,286,993	5,072,963	14,784,847	9,894,077	0.458	3,396	21,106	44,071	45,597	31,433	1.451
2015	17,303,625	5,226,299	14,053,544	10,348,047	0.427	4,890	22,828	48,413	50,326	32,541	1.547

5 Year Average 1.460

Selected: 1.500

Source:

- (1), (6) Underwriting and Investment Exhibit Part 2A; Page 10, Column 8 and 9 (Average of Current and Prior year)
- (2), (7) Underwriting and Investment Exhibit Part 1A; Page 7, Column 5 (Average of Current and Prior Year)
- (3) Underwriting and Investment Exhibit Statement of Income; Page 4, Column 1, Line 38 (Average of Current and Prior Year)
- (4), (8) Underwriting and Investment Exhibit Part 1; Page 6, Column 4
- (9) Underwriting and Investment Exhibit Part 1 Page 6, Column 1

Historic Return on Equity

(1)	(2)	(3)	(4)	(5) Pre-Tax	(6) After-Tax
	Pre-Tax	After-Tax		Return on	Return on
Calendar	Net Income	Net Income	Surplus	Equity	Equity
Year	in (\$000s)	in (\$000s)	in (\$000s)	(2)/(4)	(3)/(4)
0004	4 740 005	4 007 007	7 704 005	00.40/	47.00/
2004	1,740,395	1,367,867	7,764,265	22.4%	17.6%
2005	2,049,343	1,673,496	8,833,290	23.2%	18.9%
2006	2,846,288	2,157,507	11,277,248	25.2%	19.1%
2007	3,512,788	2,652,763	12,877,458	27.3%	20.6%
2008	1,933,057	1,507,183	12,105,466	16.0%	12.5%
2009	2,505,943	1,986,000	14,321,521	17.5%	13.9%
2010	2,581,204	2,165,817	14,317,263	18.0%	15.1%
2011	2,024,179	1,785,078	13,707,546	14.8%	13.0%
2012	1,905,424	1,660,628	13,841,016	13.8%	12.0%
2013	3,051,140	2,361,783	14,741,312	20.7%	16.0%
2014	2,590,004	2,058,273	14,828,383	17.5%	13.9%
2015	2,954,090	2,403,203	13,278,705	22.2%	18.1%
Ctual whit area		:			45.00/
Straight ave	erage, excluding n	ighest and lowest			15.8%
5 Year Aver	age				14.6%
Selected Af	ter-tax Rate of Ret	urn on Equity			15.0%

Source:

- (2) Line 18, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement
- (3) Line 20, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement
- (4) Line 38, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement

Exhibit 4.5

Effective Income Tax Rate

(1)	(2)	(3)	(4)	(5)
Calendar Year	Pre-Tax Net Income in (\$000s)	After-Tax Net Income in (\$000s)	Tax Withholdings (2) - (3)	Effective Tax Rate (4)/(2)
2011	2.024.179	1.785.078	239.101	11.8%
2012	1.905.424	1,660,628	244.796	12.8%
2013	3.051.140	2,361,783	689.357	22.6%
2014	2.590.004	2,058,273	531.731	20.5%
2015	2,954,090	2,403,203	550,887	18.6%
5 Yr Total	12,524,837	10,268,966	2,255,872	18.0%
		Selected Effective	ve Income Tax rate	18.0%

Source:

⁽²⁾ Line 18, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement

⁽³⁾ Line 20, Page 4 (Underwriting & Investment Exhibit) of the Annual Statement

Historic Investment Income Yields

	(1)	(2)	(3)
	Net		
	Investment	Cash &	Investment
	Income	Invested	Income
	Earned	Assets	Yield
Year	(AS Pg 4, Ln 9)	(AS Pg 2, Ln 10)	(1) / (2)
2011	1,509,849	33,813,671	4.5%
2012	1,306,932	34,473,281	3.8%
2013	1,186,079	34,771,379	3.4%
2014	992,121	35,423,377	2.8%
2015	1,071,444	35,351,062	3.0%
ear Averac	10		3.5%
cai /weiag	,		3.370
lected Inve	estment Income Yield		3.5%

Exhibit 5

Commercial Auto Filing

Federal Insurance Company
Great Northern Insurance Company
Pacific Indemnity Company
Vigilant Insurance Company

DISTRICT OF COLUMBIA

Earned Exposures

Year	Liability	Physical Damage
2011	430	239
2012	454	250
2013	409	278
2014	399	336
2015	439	360

Federal Insurance Company Great Northern Insurance Company Pacific Indemnity Company Vigilant Insurance Company

Actuarial Memorandum

District of Columbia Insurance Department

Commercial Auto Filing

Overview

We will adopt the following ISO commercial auto loss costs and related rules revisions with an effective date of **February 15, 2017**.

- commercial auto loss costs, ISO filing designation number CA-2015-BRLA1;

As we understand it, loss costs filing CA-2015-BRLA1 carries forward the changes from ISO's previous approved loss costs revisions. Therefore, adopting ISO's recent loss costs and related rules allows us to become current with the industry as well as update our territory relativities. We are, however, maintaining our current rates, rules, and forms for the garage product, subline number 20.0002 Garage, as noted in a prior filing.

The loss costs will be adopted using our current multipliers of 3.101 for liability and 2.416 for physical damage. The liability rate effect is -3.1%, physical damage is 4.2%. The overall rate impact is -1.9%.

Also attached is our loss costs multipliers, waived premiums, and minimum premiums rate page, Chubb Rate Page Ex. Pg. DC.1.rt, Edition 2/2017, which contains our loss costs multipliers, as well as our policy writing minimum premiums, additional and return premium rules, and minimum premiums related to the applicable sections of ISO rule 24 (truckers/motor carriers), rule 79 (repossessed autos), rule 89 (non-ownership liability, social service risks), and rule 90 (hired auto liability). The page reflects our current loss costs multipliers, while no changes were made to the previously approved waived premiums or minimum premium values.

Space Reserved for Insurance Administrative Use

Date: 11/7/16

DISTRICT OF COLUMBIA
INSURER RATE FILING
ADOPTION OF RATING ORGANIZATION
PROSPECTIVE LOSS COSTS
REFERENCE FILING ADOPTION FORM

				REFERENCE F	FILING ADOPTION FORM	
1.	INSURER NAME	Federal Insurance C	ompany, Great Nort	hern, Pacific Indemnity	Company, and	
		Vigilant Insurance	Company			
	ADDRESS	202 Hall's Mill Road			_	
		Whitehouse Station,			_	
		N. J.			_	
		08889			_	
	PERSON RESPONSIBLE FOR FILING Theresa Boyce					
	TITLE Manager,	NA Commercial State	e Filings	TELEPHONE # (215)	640-1811	
2.	INSURER NAIC #	Federal 626-20281, Gro	eat Northern 626-2030	3, Pacific Indemnity 626-20	0346, Vigilant 626-20397	
3.	LINE OF INSURANCE Commercial Automobile Liability and Physical Damage					
4.	RATING ORGANIZATION NAME <u>I.S.O.</u>					
5.	RATING ORGANI	RATING ORGANIZATION REFERENCE FILING # <u>CA-2015-BRLA1</u>				
6.	The above insurer hereby declares that it is a member, subscriber or service purchaser of the named rating organization for this line of insurance. The insurer hereby files to be deemed to have independently submitted as its own filing the prospective loss costs in the captioned Reference Filing.					
		s will be the combination tants specified in the att		ss costs and the loss cos	st multipliers and, if utilized,	
7.	PROPOSED RAT	E LEVEL CHANGE	-1.9 %	_EFFECTIVE DATE	02/15/2017	
8.	PRIOR RATE LEV	/EL CHANGE	1.7 %	_EFFECTIVE DATE	11/01/2015	
9.	ATTACH "CALCULATION OF COMPANY LOSS COST MULTIPLIER" FORM (With or without expense constraints as appropriate. Use a separate Form for each insurer-selected loss cost multiplier.) "EXPENSE INFORMATION WORKSHEET" "DISTRICT OF COLUMBIA INVESTMENT INCOME WORKSHEETS" "MOTOR VEHICLE RATE AND RULE FILING CERTIFICATION" and "PREMIUM SURVEY FORM" (For Commercial and Personal Auto filings only.)					
10.	future revision to policies w	nereby files to have its ns of the rating organiza ritten on or after the	ation's prospective lose effective date of the	s costs for this line of insurating organization's pro	constants be applicable to urance. The rates will apply ospective loss costs. This nended or withdrawn by the	
		ereby files to have its lo	•	d, if utilized, expense con	stants be applicable only to	

Insurer Name: Federal Insurance Company, Great Northern

Pacific Indemnity Company, and Vigilant Insurance Company

NAIC Number: Federal 626-20281, Great Northern 626-20303, Pacific Indemnity 626-20346, Vigilant 626-20397

District of Columbia Calculation of Company Loss Cost Multiplier Without Expense Constant

Date: 11/7/16

To Accompany Adoption of Rating Organization Prospective Loss Costs Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies: **Commercial Auto Liability** 2. Loss Cost Modification: A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing: (CHECK ONE) \square without modification (factor = 1.000). with the following modification factor (Cite the nature and percent modification, supporting data, and the NUMERIC DERIVATION of the modification.): Please refer to Exhibit 1.1 B. Loss Cost Modifier Expressed as a Factor: 1.749 Development of Expected Loss Ratio (Attach exhibit detailing expense data and/or other supporting information.): Selected Provisions % A. Commission and Brokerage Expense (+) 13.2% B. Other Acquisition Expense (+) 11.2% C. General Expense (+) 3.9% D. Taxes, Licenses, and Fees (+) 2.2% E. Underwriting Profit and Contingencies (+) 13.1% F. Investment Income Offset (-) *investment income is included in item E; (please refer to Exhibit 3) G. Other (explain) (+) H. TOTAL 43.6% Expected Loss Ratio (ELR): A. ELR (100% - 3H) =56.4% B. ELR in decimal form = 0.564 Company Calculated Loss Cost Multiplier (2B / 4B): 3.101 Company Selected Loss Cost Multiplier: 3.101 (If different than 5 above, then attach supporting documentation, rationale, and the numeric derivation of the Selected Loss Cost Multiplier): Rate Level Change for the Coverage to Which this Form Applies: A. Change in Loss Cost Expressed as a Factor = 0.969 B. Change in Multiplier Expressed as a Factor = 1.000

C. Overall Rate Change $[(7A \times 7B) - 1] \times 100 =$

-3.1%

Insurer Name: Federal Insurance Company, Great Northern

Pacific Indemnity Company, and Vigilant Insurance Company

NAIC Number: Federal 626-20281, Great Northern 626-20303, Pacific Indemnity 626-20346, Vigilant 626-20397

District of Columbia Calculation of Company Loss Cost Multiplier Without Expense Constant

Date: 11/7/16

To Accompany Adoption of Rating Organization Prospective Loss Costs

1.	Line, Subline, Coverage, Territory, Class, etc. combination to which this page applies: Commercial Auto Physical Damage Loss Cost Modification: A. The insurer hereby files to adopt the prospective loss costs in the captioned reference filing: (CHECK ONE) without modification (factor = 1.000). with the following modification factor (Cite the nature and percent modification, supporting data, and the NUMERIC DERIVATION of the modification.): Please refer to Exhibit 1.1					
2.						
	B. Loss Cost Modifier Expressed as a Factor:	1.515				
3.	Development of Expected Loss Ratio (Attach exhibit detailing expense data and/or other supporting information.):					
	A. Commission and Brokerage Expense (+) B. Other Acquisition Expense (+) C. General Expense (+) D. Taxes, Licenses, and Fees (+) E. Underwriting Profit and Contingencies (+) F. Investment Income Offset (-) *investment income is included in item E; (please refer to Ex G. Other (explain) (+) H. TOTAL	Selected Provisions % 12.8% 10.7% 2.7% 2.1% 9.0% shibit 3)				
4.	Expected Loss Ratio (ELR):					
	A. ELR (100% - 3H) = B. ELR in decimal form =	62.7% 0.627				
5.	Company Calculated Loss Cost Multiplier (2B / 4B):	2.416				
6.	Company Selected Loss Cost Multiplier: (If different than 5 above, then attach supporting documentation, rationale, and the numeric derivation of the Selected Loss Cost Multiplier):					
7.	Rate Level Change for the Coverage to Which this Form Applies:					
	 A. Change in Loss Cost Expressed as a Factor = B. Change in Multiplier Expressed as a Factor = C. Overall Rate Change [(7A x 7B) - 1] x 100 = 	1.042 1.000 4.2%				